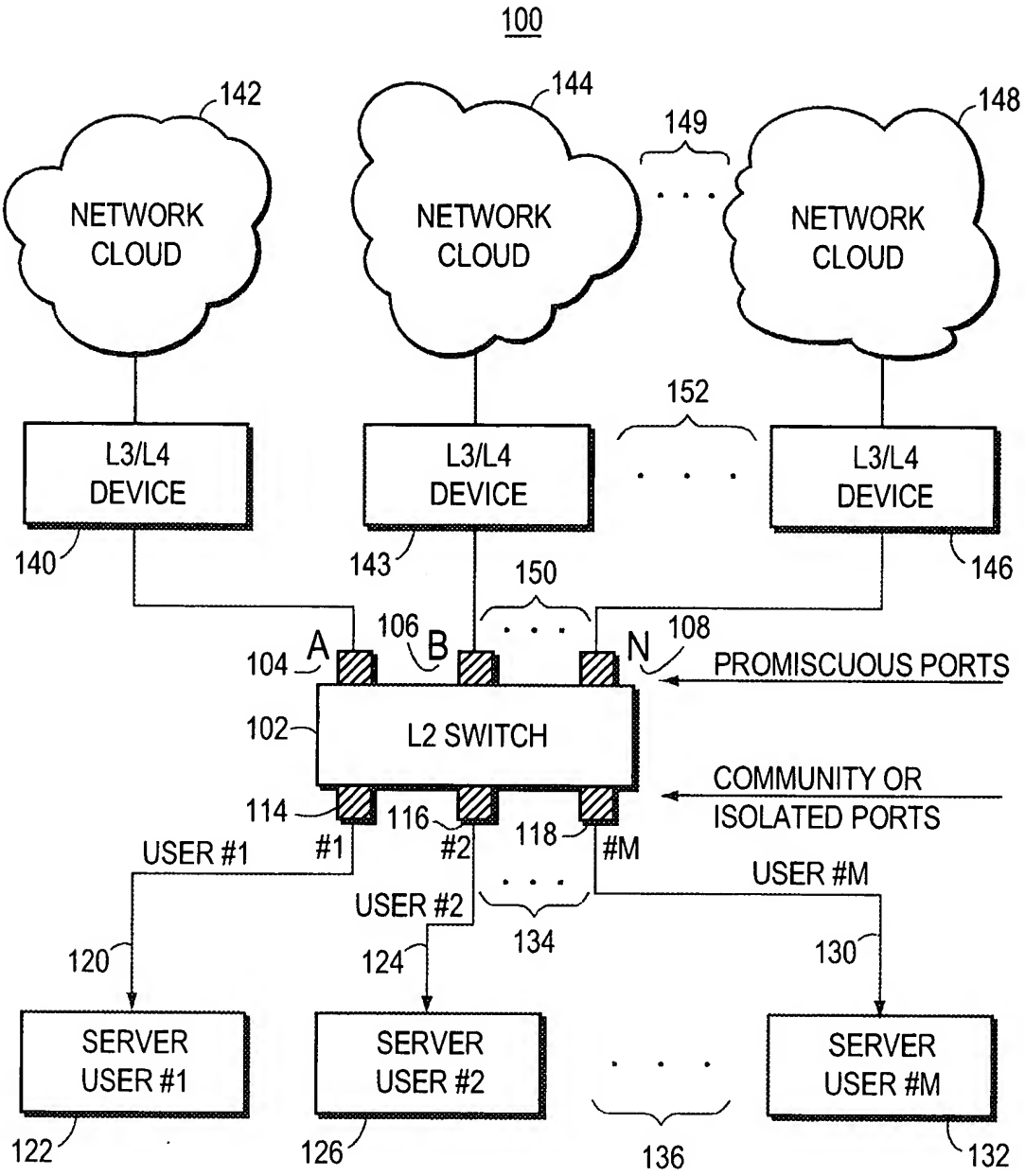

100
142
144
149
148
NETWORK CLOUD
NETWORK CLOUD
NETWORK CLOUD
152
L3/L4 DEVICE
L3/L4 DEVICE
L3/L4 DEVICE
140
143
146
150
106
108
104
A
B
N
PROMISCUOUS PORTS
102
L2 SWITCH
COMMUNITY OR ISOLATED PORTS
114
116
118
#1
#2
#M
USER #1
USER #2
USER #M
134
120
124
130
SERVER USER #1
SERVER USER #2
SERVER USER #M
122
126
136
132

FIG. 1

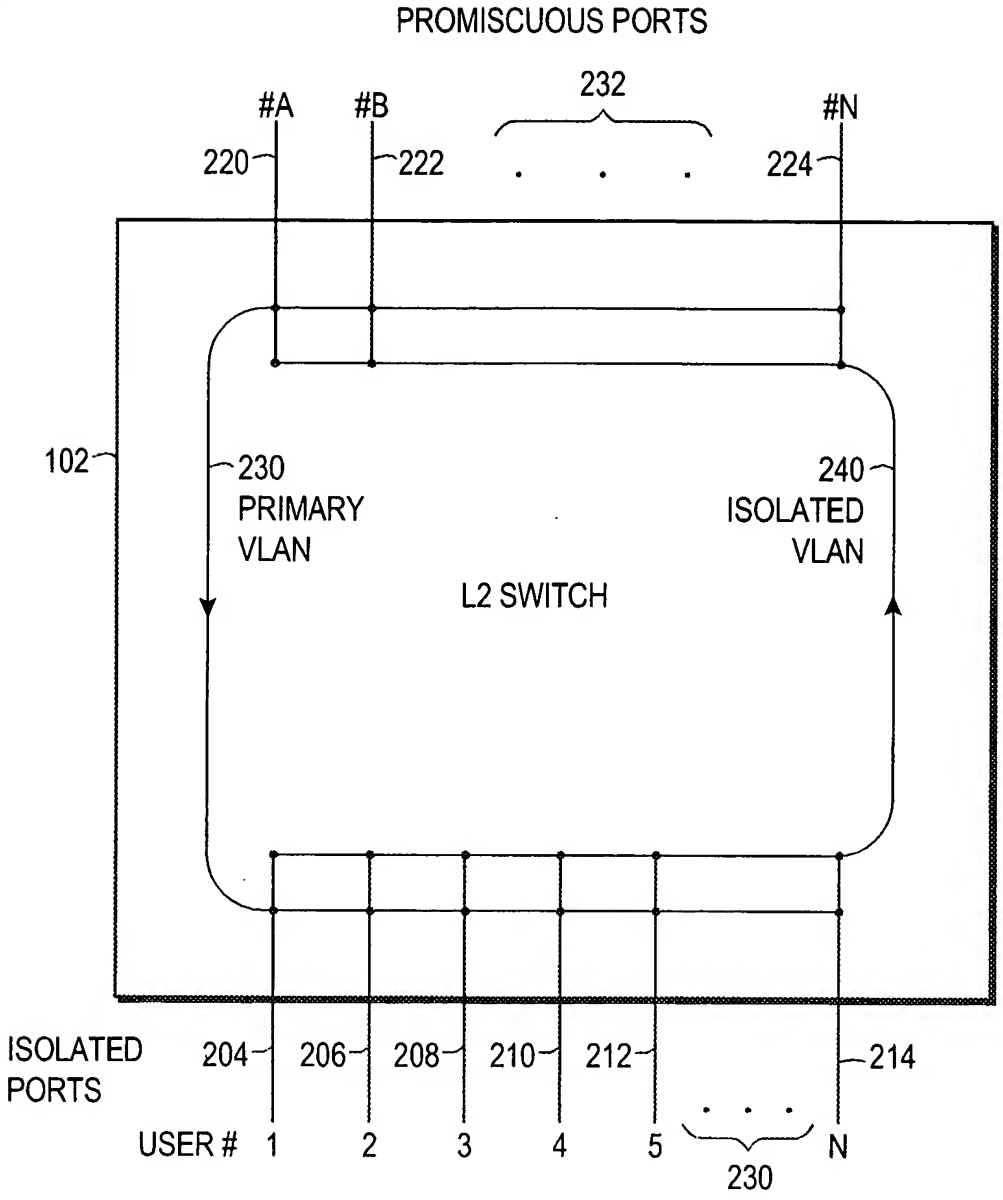

PROMISCUOUS PORTS
#A
#B
232
#N
220
222
224
102
230
PRIMARY
VLAN
240
ISOLATED
VLAN
L2 SWITCH
ISOLATED
PORTS
204
206
208
210
212
214
USER #
1
2
3
4
5
N
230

FIG. 2

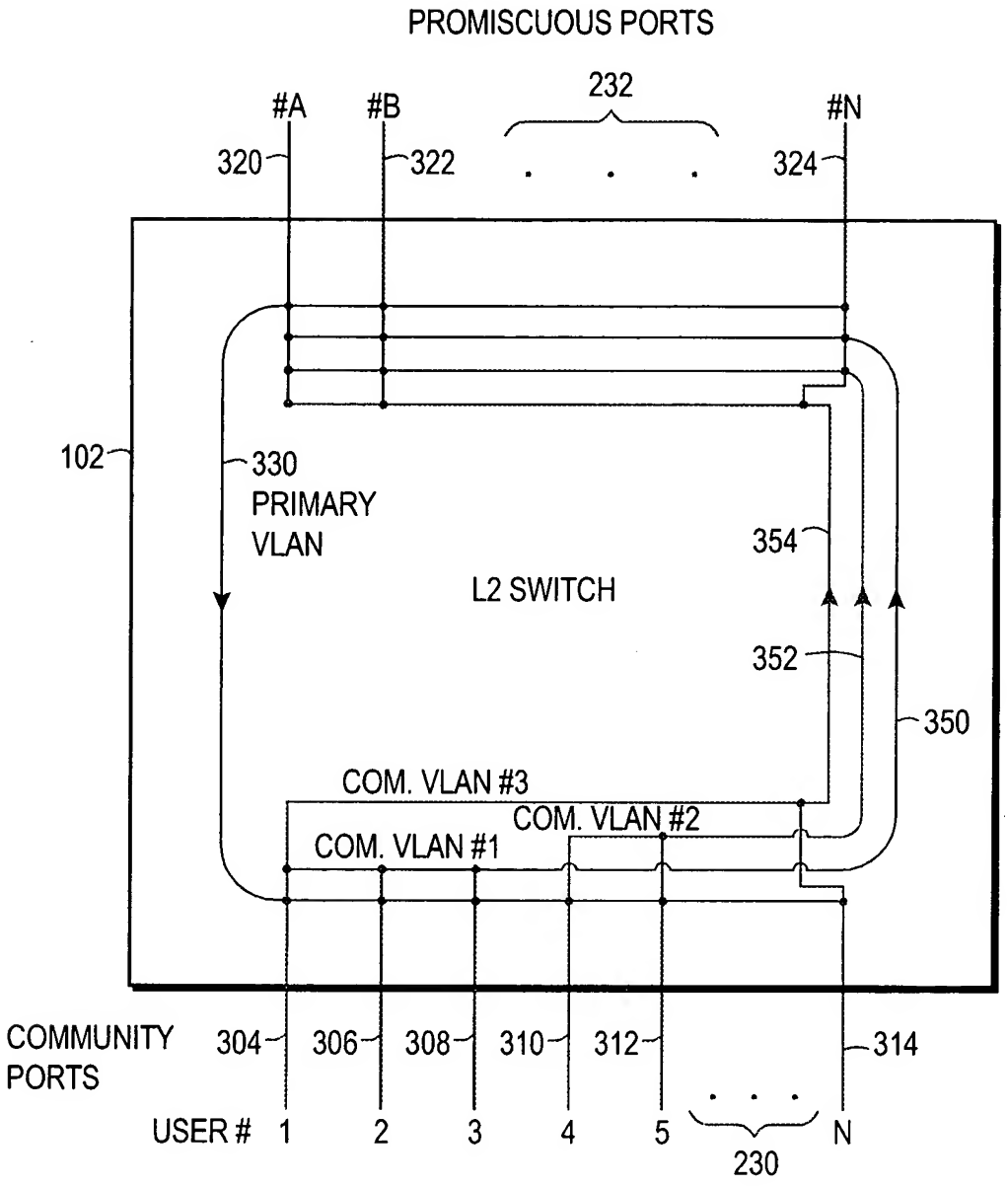

PROMISCUOUS PORTS
#A
#B
232
#N
320
322
324
102
330
PRIMARY
VLAN
354
L2 SWITCH
352
350
COM. VLAN #3
COM. VLAN #2
COM. VLAN #1
COMMUNITY
PORTS
304
306
308
310
312
314
USER #
1
2
3
4
5
N
230

FIG. 3

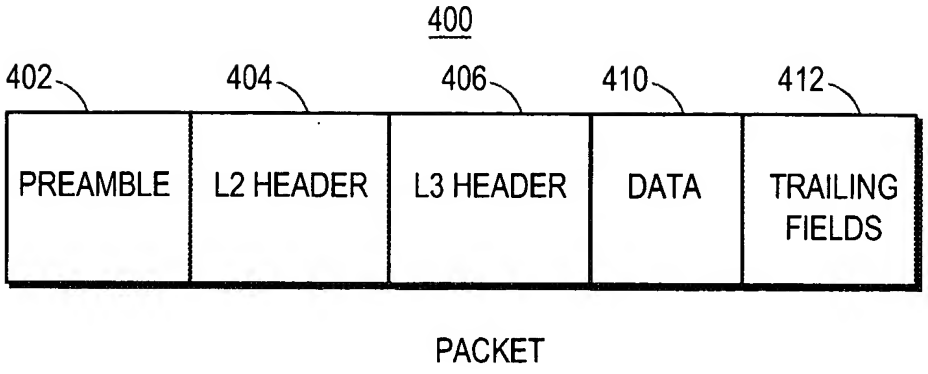

400
402
404
406
410
412
PREAMBLE
L2 HEADER
L3 HEADER
DATA
TRAILING FIELDS
PACKET

FIG. 4

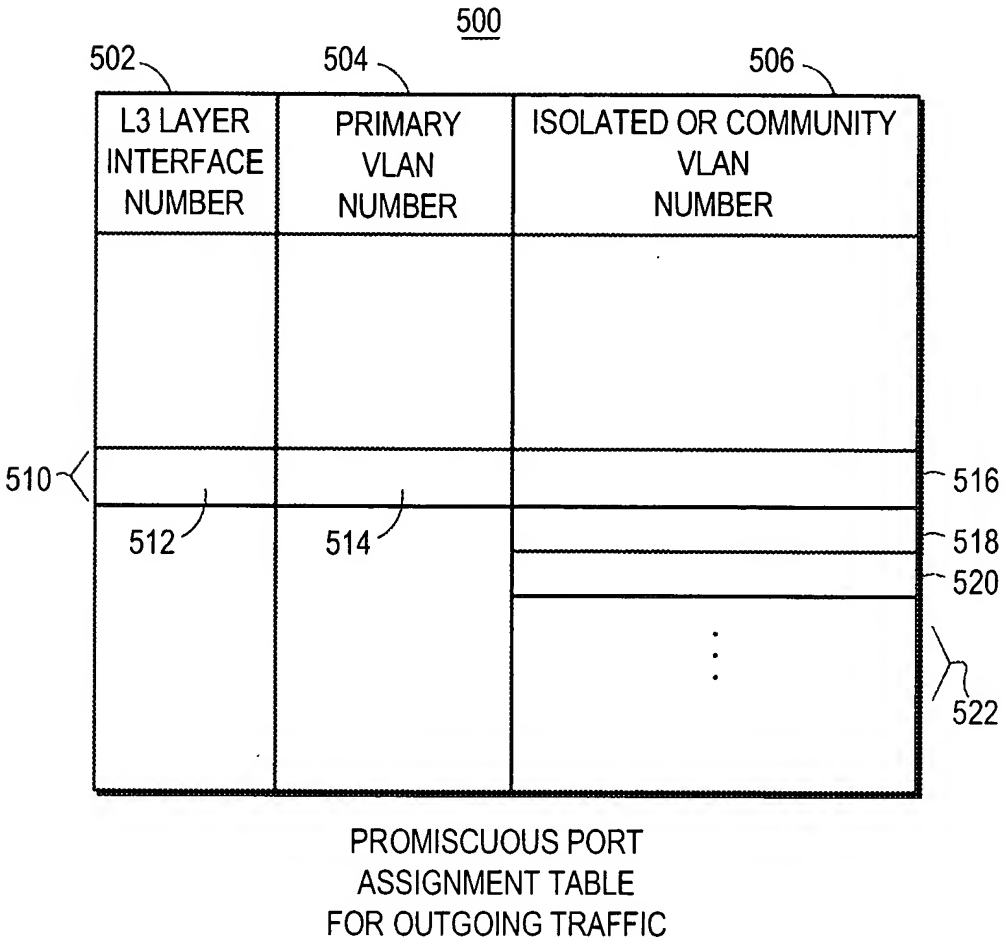
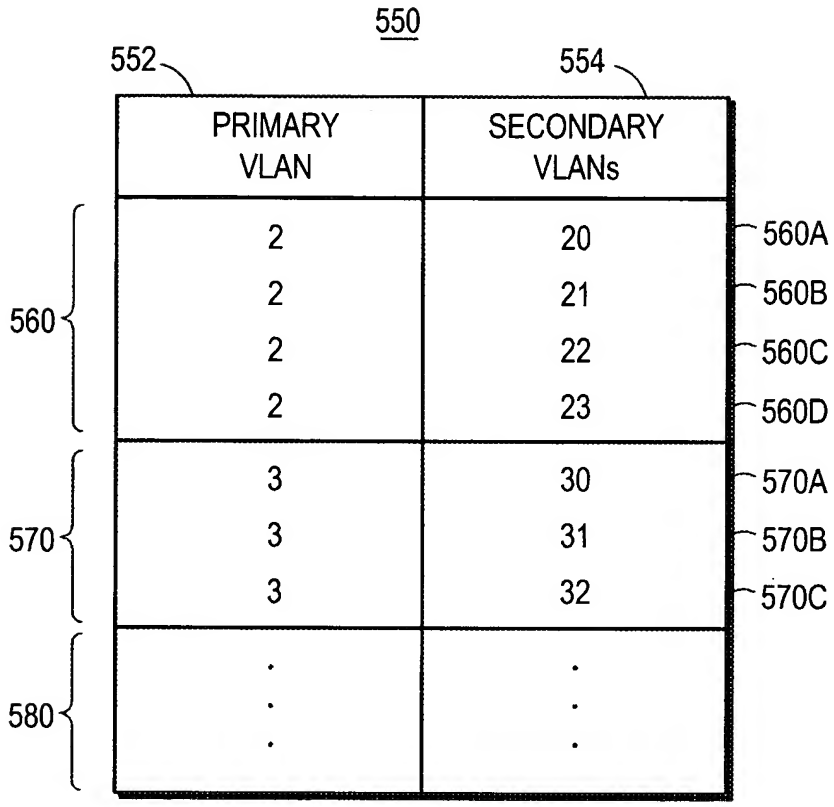

500
502
504
506
L3 LAYER INTERFACE NUMBER
PRIMARY VLAN NUMBER
ISOLATED OR COMMUNITY VLAN NUMBER
510
512
514
516
518
520
522
PROMISCUOUS PORT ASSIGNMENT TABLE FOR OUTGOING TRAFFIC

FIG. 5



TRUNK TYPE PROMISCUOUS
PORT VLAN MAPPING TABLE

FIG. 5A

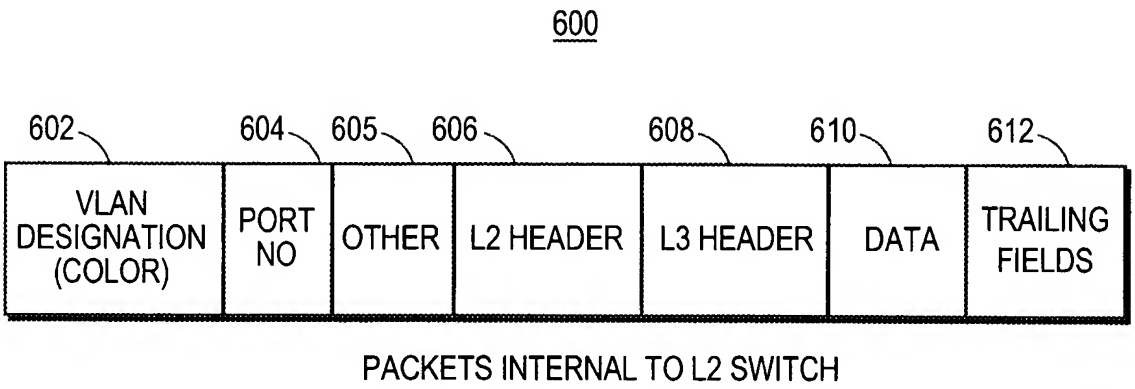

600
602
604
605
606
608
610
612
VLAN DESIGNATION (COLOR)
PORT NO
OTHER
L2 HEADER
L3 HEADER
DATA
TRAILING FIELDS
PACKETS INTERNAL TO L2 SWITCH

FIG. 6

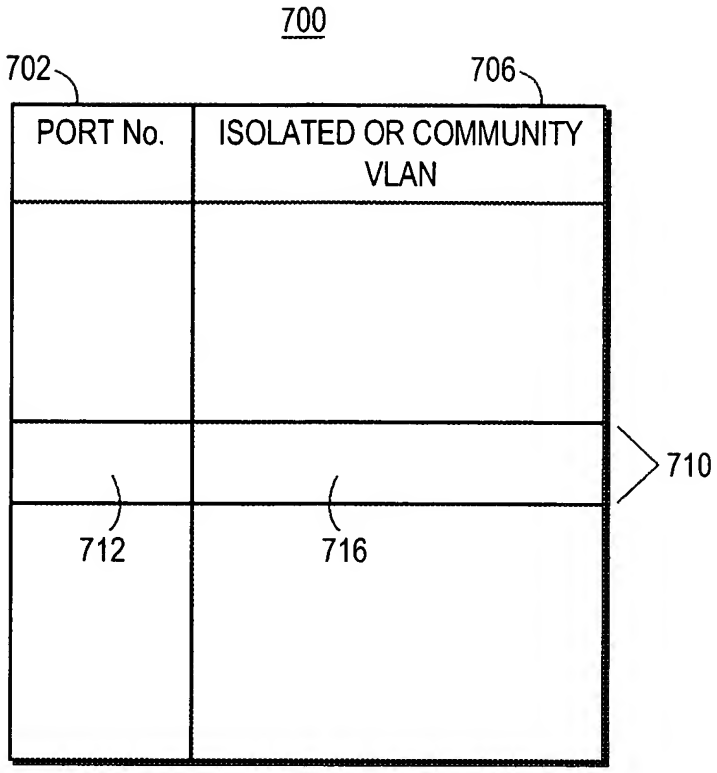

700
702
706
PORT No.
ISOLATED OR COMMUNITY VLAN
710
712
716
ISOLATED OR COMMUNITY PORT ASSIGNMENT TABLE

FIG. 7

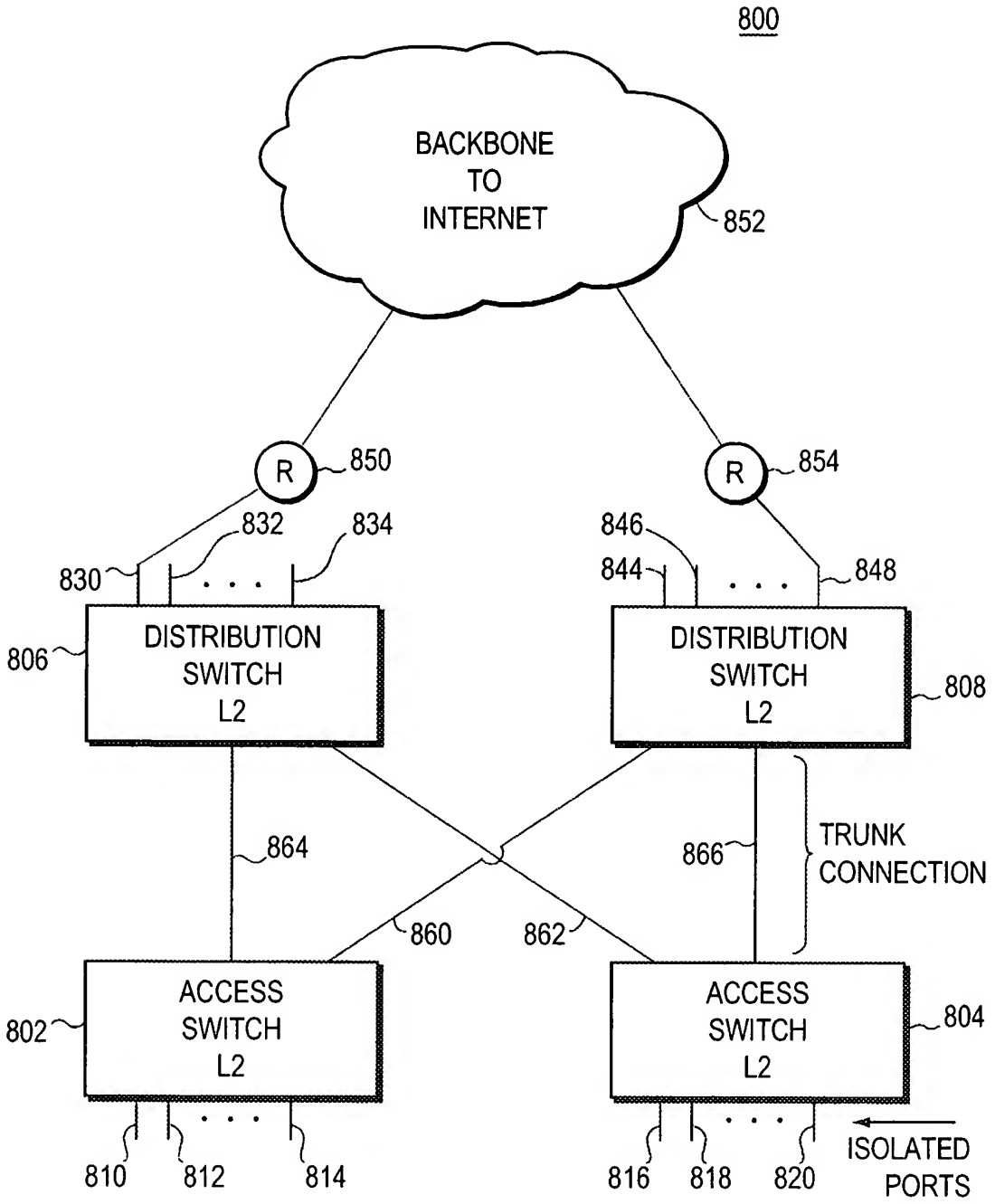

800
BACKBONE
TO
INTERNET
852
R
850
R
854
832
834
830
846
844
848
DISTRIBUTION
SWITCH
L2
806
DISTRIBUTION
SWITCH
L2
808
864
866
TRUNK
CONNECTION
860
862
ACCESS
SWITCH
L2
802
ACCESS
SWITCH
L2
804
810
812
814
816
818
820
ISOLATED
PORTS

FIG. 8